

In re Application of: Arie ARIAV
Serial No.: 10/522,769
Filed: January 31, 2005
Final Office Action Mailing Date: September 30, 2008

Examiner: Vijay B. CHAWAN
Group Art Unit: 2626
Attorney Docket: 29181

It is believed that the Examiner did not fully understand Applicant's arguments, nor the relevancy of these arguments to a rejection under 35 U.S.C. §102(b). In the hope that an Appeal may be avoided, Applicant would now like to more fully elaborate on these arguments and to more clearly show that 35 U.S.C. §102(b) does not support this rejection of all the claims by the Examiner.

First, it is to be pointed out that Examiner's comments, as quoted above, merely set forth the well-known doctrine that a patent claim is "open-ended". That is, if the prior art does indeed disclose the invention defined in the claims under consideration, the fact that the prior art (or an allegedly infringing device) includes additional elements to those claims is of no relevance. Actually, in virtually all cases where prior art is determined to disclose the invention claimed, such prior art would also include additional structural features not found in the claims. The same applies when the "open-ended" doctrine is applied with respect to the issue whether a device produced after the patent issues constitutes an infringement of the patent.

This Application of the doctrine that claims are "open-ended" assumes that the invention defined in the respective claim is indeed disclosed by the prior art reference, that is, the claim lacks novelty over the prior art reference, as defined in 35 U.S.C. §102(b). Accordingly, it is necessary to consider the meaning of the "lack of novelty" criterion under 35 U.S.C. §102 justifying a rejection of a claim under this section.

The propriety of a rejection under 35 U.S.C. §102 has been clearly established by many Court decisions; see for example, the following quotation from American Permahedge Inc. v. Barcana, Inc. 32 USPQ2d 1901 (at Pages 1807-1808):

"Prior art anticipates an invention, rendering it invalid, pursuant to 35 U.S.C. 102, if a single prior art reference contains each and every element of the patent at issue, operating in the same fashion to perform the identical function as the patented product. Scripps Clinic & Research Found v. Genentech, Inc., 927 F.2d 1565, 1576 [18 USPQ2d 1001] (Fed.Circ.1991); Carella v. Starlight Archery & Pro Line Co., 804 F.2d at 138. 'There must be no difference between the claimed invention and the

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referenced disclosure, as viewed by a person of ordinary skill in the field of the invention.’ Scripps Clinic & Research Found v. Genentech, Inc., 927 Fig. 2d at 1576; see also E.I. Du Pont Nemours & Co. v. Polaroid Graphics Imaging, Inc., 706 Fig. Supp. 1135, 1142 [10 USPQ2d 1579] (D. Del 1989), *aff’d*, 887 F.2d 1095 [13 USPQ2d 1731] (Fed. Cir. 1989) (‘all of the same elements [must be] found in exactly the same situation and united in the same way ... in a single prior art reference’) (quoting Perkin Elmer Corp. v. Computervision, Corp., 732 F.2d 888, 894 [221 USPQ 669] (Fed. Cir. 1984). Thus, any degree of physical difference between the patented production and the prior art, no matter how slight, defeats the claim of anticipation. E.I. Du Pont de Nemours & Co. v. Polaroid Graphics Imaging, Inc., 706 F.Supp. At 1142”

The novelty defined in the system of claim 1 is not in the ultimate function of the system, but rather in the combination features for attaining that ultimate function.

Thus, as pointed out in the previous response, the passages referred to by the Examiner as appearing in the primary reference clearly do not disclose, or even remotely suggest, the combination of features set forth in claim 1 broadly defining the novelty of the present application.

Thus, as pointed out in the previous response, claim 1 recites, among others, the combination of the following features:

(a) a filter system connected to receive the electrical outputs of the microphone and to produce for each voice command a first output corresponding to the high-frequency component of the voice command, and a second output corresponding to the low-frequency component of the voice command; and

(b) a processor for processing the first and second outputs of the filter system and for outputting, for each voice command:

(i) a first electrical signal when the low-frequency component precedes the high-frequency component in the respective voice command, and

(ii) a second electrical when the high-frequency component precedes the low-frequency component in the respective voice command.

As further pointed out, the system defined in claim 1 is thus (a) “frequency dependent” in that it analyzes the frequency of the respective command to produce one output for the high-frequency component, and a second output for the low-frequency

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component; and also (b) “sequence-dependent”, in that it determines the command by examining the sequence in which the above two outputs are produced.

As still further pointed out, the system defined in claim 1 is to be sharply contrasted with the much more complicated system of the cited reference, which is neither “frequency dependent”, nor “sequence-dependent”. Rather, it is (a) time-dependent, and (b) model dependent. Thus, as clear from the passages referred to by the Examiner, in the cited reference “a frame is extracted once every 10 milliseconds” (column 7, lines 28–29); “the magnitude of the discrete Fourier transform (DFT) of the frame is calculated” (column 7, lines 57–59); and the output signals “are compared with stored reference models which model the words already known to the system and the acoustic environment surrounding the system” (column 10, lines 19–21).

The system of the cited reference is, therefore, considerably more complicated than the simple system of the present invention as defined in claim 1, since the reference system, not only divides the command into time frames, but also determines a particular characteristic of each time frame, produces a “model” of each frame, updates that model, etc., in order to identify the particular command. In the invention of the present application, however, all that is necessary is to filter the signal of the respective spoken command, produce a high-frequency component and a low-frequency component of the respective command, and compare which component precedes the other; no models are required or updated.

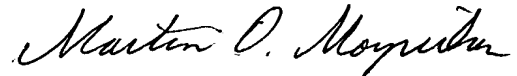
35 U.S.C. §102 sets forth the “lack of novelty” ground for rejecting a claim, and the above-quoted passage sets forth when a rejection under 35 U.S.C. §102 is proper, as interpreted by many Court decisions. It is to be particularly emphasized that the “novelty” defined in claim 1 is not the ultimate function but rather the combination of features as set forth in the claim for producing the ultimate function. It is clear, therefore, that this rejection of claim 1, as well as all the other claims in the Application, under the cited reference is not supported by 35 U.S.C. §102.

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It is therefore respectfully requested that the Examiner, in light of the above arguments, reconsider and withdraw the rejection of the claims under 35 U.S.C. §102, and issue a Notice of Allowance on the above Application. An early action is particularly solicited to provide Applicant sufficient time to file an Appeal, if necessary.

Respectfully submitted,

A handwritten signature in cursive script, reading "Martin D. Moynihan".

Martin D. Moynihan
Registration No. 40,338

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